DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009822 Address: 333 Burma Road **Date Inspected:** 24-Oct-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Zhong An, Cheng Ying Xin CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A

Delayed / Cancelled:

Bridge No: 34-0006 **Component:** Tower/OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY #10

This QA Inspector randomly observed the following work in progress.

NORTH TOWER LIFT #3

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040261 performing Flux Cored Arc Welding process for the weld NSTL3-3B/K-84A located on PCMK corner weld between skin A and skin E of North tower lift 3. ZPMC QC Mr. Cheng Ying Xin monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-2G (2F) Repair.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052439 performing Shielded Metal Arc Welding process for the weld NSTL3-3B/K-84B located on PCMK corner weld between skin A and skin E of North tower lift 3. ZPMC QC Mr. Cheng Ying Xin monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-FCAW-2G (2F) Repair.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050038 performing Shielded Metal Arc

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Welding process for the weld NSTL3-3D/K-51 located on PCMK North tower lift 3. ZPMC QC Mr. Cheng Ying Xin monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-3212-B-U2a-2.

SOUTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Core Arc Welding process for the weld joint SSTL4-1B/C -4B located on PCMK South tower lift #4. ZPMC QC Mr. Yuan Hui Gang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U4B-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 040343, 050041 performing Flux Core Arc Welding process for the weld joint SSTL4-1B/C -3B located on PCMK South tower lift #4. ZPMC QC Mr. Yuan Hui Gang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-3212-TC-U4B-F.

NORTH TOWER LIFT #4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053469 performing tack weld for the corner weld between skin D and skin E of north tower lift 4 with Shielded Metal Arc Welding process. ZPMC QC Mr. Jiang Bo monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2211-C-U2.

HEAVY DOCK/JETTY

This QA Inspector randomly observed the following work in progress.

SOUTH TOWER LIFT # 1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 057244 performing Flux Core Arc Welding process for the weld joint SSD1-A111B/H-49 located on PCMK South tower lift #1. ZPMC QC Mr. Zhou Yu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2232-TC-U5-F.

EAST TOWER LIFT # 1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040736 performing Flux Core Arc Welding process for the weld joint ESD1-A167B/H-38 located on PCMK East tower lift #1. ZPMC QC Mr. Zhou Yu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P5-F.

TRIAL ASSEMBLY YARD

OBSERVATIONS

OBG SEGMENT 2AE-2BE

This Quality Assurance (QA) Inspector observed ZPMC personnel gouged (excavated) bottom panel splice weld (outside) between OBG segment 2AE and 2BE. The 'Y' location and length of excavations as below.

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'Y' Location Length

1) 1500mm to 5000mm 3500mm 2) 5760mm to 8260mm 2500mm

OBG SEGMENT 2AW-2BW

This Quality Assurance (QA) Inspector observed ZPMC personnel gouged (excavated) side panel splice weld (inside) between OBG segment 2AE and 2BE counter weight side at various locations.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer

^{&#}x27;Y' locations are measured from cross beam side